

WISHA REGIONAL DIRECTIVE

Department of Labor and Industries

Division of Occupational Safety and Health

7.00 ROLLING OUTRIGGERS ON MOBILE CRANES

Date Issued: August 10, 2006

I. Background

There is a need for clearer guidance regarding the use of rolling outriggers on mobile cranes. The rolling outrigger concept came about several years ago in the concrete tilt-up market as a means to substantially increase the cranes “on rubber chart” while retaining the crane’s mobility. Rolling outriggers usually consist of a set of rollers attached to a steel support structure that replaces the crane’s standard outrigger pad.

In order to fully use these rolling outriggers, the user must set part of the weight of the crane on its wheels so that it can maneuver. ASME B30.5, 2004 (5-3.2.1.5(h)) states, “Any time outriggers are used, the outriggers shall be extended or deployed per the crane manufacturer’s load/capacity chart specifications and set to remove the machine weight from the wheels, except for locomotive cranes.”

There are crane manufacturers that provide rolling outriggers as an option for their cranes. When they do provide these, they also provide a corresponding load chart that addresses the use and limitations of the crane while using the rolling outriggers. This would be the ideal situation for cranes using rolling outriggers.

It is the crane manufacturer that must supply the load chart for the configuration that the crane is set up for. If the crane manufacturer does not address the use of rolling outriggers while some of the crane’s weight is on its wheels, then the user must use the “on rubber” chart.

II. Scope and Application

This WISHA Regional Directive (WRD) provides guidance to DOSH enforcement and consultation staff whenever they encounter mobile cranes using rolling outriggers and will remain in effect until rescinded. It replaces any previous guidance on the subject, whether formal or informal. It also replaces, but not substantively changes, WRD 7.00, issued February 2, 2006, which is hereby rescinded.

III. Interpretive Guidance

A. *What code would DOSH staff use if it is found that an employer is using rolling outriggers and not following the manufacturer's specifications or was not using the "on rubber" load chart?*

Crane operations involving tilt-up operations come under the Construction Standard; WAC 296-155-525(2)(a) General Requirements would apply. Additionally, if the employer is using rolling outriggers that were not supplied by the manufacturer, then WAC 296-155-525(3)(g) Additional Requirements would also apply; as this would be considered a modification or addition which would affect the capacity or safe operation of the equipment.

B. *Could a Registered Professional Engineer (RPE) develop a load chart for a mobile crane that uses rolling outriggers?*

The above WACs state that a qualified engineer's written approval could be used providing the manufacturer's specifications are not available. DOSH would recognize a load chart that was developed by an RPE for a mobile crane using rolling outriggers. This load chart must be less than the load chart for that same crane using fully extended outriggers with the crane's weight removed from its wheels. In the event that specific situations require further guidance, staff should consult the crane specialist in DOSH Compliance Operations.

Approved: _____
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